

U.S. DEPARTMENT OF ENERGY  
**Office of Electricity Delivery and  
Energy Reliability**



# **ENERGY ASSURANCE DAILY**

**August 30, 2005**

## **Highlights/Major Developments**

### **Update: Hurricane Katrina**

**OFFICE OF ELECTRICITY DELIVERY AND ENERGY RELIABILITY (OE)  
U.S. DEPARTMENT OF ENERGY  
Hurricane Katrina Situation Report #11  
August 30, 2005 (4:00 PM EDT)**

## **HIGHLIGHTS**

Some 2.6 million customers have reported outages due to Hurricane Katrina in Louisiana, Mississippi, Alabama, Florida, and Georgia (see table below). Louisiana reports approximately 890,300 customers without power. Mississippi has about 909,200 customers without power and Alabama has approximately 624,400 customers without power.

Extensive flooding is a major issue for electricity restoration. The size of the hurricane, the extensive physical damage to property and the number of utilities impacted will significantly slow the speed of restoration efforts.

Secretary Bodman issued a press release on August 29 noting that should circumstances warrant, the President can direct that petroleum be withdrawn from the Strategic Petroleum Reserve and sold to refineries.

OE is currently working with EPA to issue waivers for those States impacted by Katrina. These waivers would make available to first responders fuel that is currently restricted due to Clean Air Act restrictions.

Katrina has been downgraded to a tropical depression with sustained winds at near 35 mph. Katrina is expected to become extratropical during the next 12 to 24 hours. The center of the tropical depression is about 25 miles south of Clarksville, Tennessee and is moving toward the north-northeast near 21 mph. The latest NOAA information on the storm track is available at: <http://www.nhc.noaa.gov/> and the National Hurricane Center has made its last public advisory on the storm. The next tropical depression in the Caribbean had degenerated but is still being monitored for possible signs of regeneration.

## **PETROLEUM AND GAS INFORMATION**

Gulf Intercoastal Waterways are fully open along the Lower Mississippi and Port Allen Route. Dauphin Island and the Pascagoula Harbor are in good shape. The Mobile Ship Channel is passable around a mobile offshore drilling unit that is lodged under the bridge at the north end of Mobile Harbor. A BP terminal in

Mobile was damaged by an adrift vessel. No problems are anticipated east of Mobile along the Gulf Intercoastal Waterway. An ocean-going barge is aground near Belle Chasse, LA.

According to the U.S. Coast Guard, the Calcasieu Ship Channel was closed Sunday evening as a precaution. Although Hurricane Katrina did not pass over the channel, high winds associated with the storm lead officials to keep it closed until 6:08 am Tuesday morning. One inbound ship and two outbound vessels were waiting when the channel reopened. Tankers typically move crude oil, gasoline, LNG, chemicals, aggregate, bulk agricultural, and bulk pet-coke through this narrow channel. The channel, which connects Lake Charles with the Gulf of Mexico, is one of the busiest ports in the country -- 11th largest based on tonnage.

According to press reports, the Louisiana Offshore Oil Port did NOT suffer major damage as a result of Hurricane Katrina. Both offshore and onshore LOOP operations remain suspended, however, until power is restored. Also, Port Fourchon, the Louisiana port that handles 18% of domestic oil and gas and 13% of imports, has suffered extensive damage. Floodwaters have cut off access to the port.

According to MMS, shut-in oil production is at 1,427,969 barrels per day. This production is equivalent to 95% of the daily oil production in the Gulf of Mexico, which is usually approximately 1.5 million barrels per day. Shut-in gas production is currently at 8,798 billion cubic feet per day, equivalent to 88% of daily gas production in the Gulf of Mexico.

The Strategic Petroleum Reserve at New Orleans Elmwood complex remains shut down. Bayou Choctaw, Bryan Mound, Big Hill and West Hackberry sites, however, are operational.

Colonial and Plantation petroleum product pipelines, which provide the majority of gasoline, diesel fuel, and jet fuel to the Southeast, Mid-Atlantic, and Northeast states, are currently not operating due to loss of power at key pump stations in LA and MS.

The LA Public Service Commission is working with the power companies to assess the situation and provide guidance on priorities. FEMA Region IV is also working with the Mississippi Emergency Operations Center on the same issues

The pump stations which lost power on the Colonial Pipeline are as follows:

<b>Pump Station</b>	<b>Status</b>
Baton Rouge, LA	Restored
Felixville, LA	Restored
McComb, MS	Out of Service
Columbia, MS	Out of Service
Collins Delivery, MS	Out of Service
Collins Injection, MS	Out of Service
Kola, MS	Out of Service

Colonial pipeline is currently looking to secure generators to power the remaining out-of-service pump stations until power can be restored by the utility.

The pump stations which lost power on the Plantation Pipeline are as follows:

<b>Pump Station</b>	<b>Status</b>
Collins, MS (also applies to Colonial)	Out of Service
Osyka, MS	Out of Service
Dock station, Baton Rouge	Out of Service
Meridian, MS	Out of Service
Pascagoula, MS	Out of Service
McClain, MS	Out of Service
Hathorn, MS	Out of Service
Fluker, MS	Out of Service

Dixie pipeline (a propane line) is also shut down. Other product pipelines are not experiencing any problems: TEPPCO is moving products from Texas into the Northeast and Centennial is moving products from Texas into Illinois.

Capline, a crude oil pipeline serving the Midwest, is shut down.

The following table displays refineries located in states impacted by Hurricane Katrina:

### **Refineries Located in States Impacted by Hurricane Katrina**

<b>COMPANY_NAME</b>	<b>STATE</b>	<b>SITE</b>	<b>Bbl/day (calendar )</b>	<b>Status</b>
Shell Chemical	Alabama	Saarland	80,000	Not available
Citgo Petroleum Corp. *	Louisiana	Lake Charles	324,300	Loss of supply from Calcasieu Channel closing. May reduce runs tomorrow
ConocoPhillips *	Louisiana	Belle Chasse	247,000	Shutdown; expect water damage
ConocoPhillips *	Louisiana	Lake Charles	239,400	Loss of supply from Calcasieu channel closing
Chalmette Refining LLC	Louisiana	Chalmette	187,200	Shutdown; expect water damage
ExxonMobil Refining & Supply Co. *	Louisiana	Baton Rouge	493,500	Was at reduced runs for a short time; back to normal operations.
Marathon Ashland Petroleum LLC.	Louisiana	Garyville	245,000	Shutdown
Murphy Oil USA Inc.	Louisiana	Meraux	120,000	Shutdown – expect water damage
Motiva Enterprises LLC	Louisiana	Convent	235,000	Shutdown
Motiva Enterprises LLC	Louisiana	Norco	226,500	Shutdown
Placid Oil *	Louisiana	Port Allen	48,500	Shutdown – plant on warm circulation
Valero Refining Co. - Louisiana	Louisiana	Krotz Springs	80,000	Reduced runs
Valero Saint Charles Refinery	Louisiana	Norco	185,000	Shutdown – out 1 or 2 weeks
Chevron USA Inc. *	Mississippi	Pascagoula	325,000	Shutdown
Premcor	Tennessee	Memphis	180,000	Loss of Capline supply; Reduced runs
Koch *	Texas	Corpus Christi	156,000	None
Total *	Texas	Port Arthur	285,000	Loss of supply; Reduced runs

\* Refineries with company owned and operated on-site power generation.

## **ELECTRICITY INFORMATION**

### **STATE OUTAGE DATA (8/30/05 3:00 PM)**

<b>Utility</b>	<b>Customers w/o Power</b>	<b>Total Customers</b>	<b>% Customers w/o Power from Katrina</b>
Alabama	624,427	2,339,004	27%
Florida	194,856	9,075,577	2%
Georgia	12,500	4,156,052	<1%
Louisiana	890,294	2,130,925	42%
Mississippi	909,173	1,420,571	64%
<b>Total</b>	<b>2,631,250</b>	<b>19,122,129</b>	<b>14%</b>

## **STATE REPORTS**

### **Alabama**

Approximately 624,427 customers (as of 2:30 PM 8/30/05) are without power in Alabama due to Katrina. Of these, 476,606 are in the Alabama Power service area. In addition, 102,821 Co-op customers have reported outages and 45,000 Municipal customers have reported outages. Alabama Power Company reports that early indications are that Hurricane Katrina has caused extensive damage to the Alabama Power system including the company's transmission system and other infrastructure, and customers should expect extended outages. Katrina is the second-worst storm in Alabama Power history in terms of outages, leaving 636,891 customers without power at its peak. Company officials anticipate that restoration efforts may take far longer than those following Hurricane Ivan, which left more than 825,000 customers without power in 2004. Ivan restoration took eight days. Company emergency crews worked through the night. Damage assessment teams were out at first light today. The company hopes to have a full assessment of the damage later today. Alabama Power has commitments from outside utilities to support our restoration efforts. However, resources are limited and are also needed in hard hit areas in Mississippi and Louisiana.

### **Mississippi and Louisiana**

Approximately 909,200 (as of 2:30 PM 8/30/05) customers are without power in Mississippi due to Katrina. Of these, 287,234 are in the Entergy service area, 196,000 are in the Mississippi Power service area, and 425, 939 are in the Mississippi Electric Power Association service area. Mississippi Power will begin the rebuilding process today to restore service to its customers. All of the company's 195,000 customers are without power in the aftermath of Hurricane Katrina. According to the president and CEO of Mississippi Power the company "has suffered the worst catastrophe in our company's history." The company expects later today to have an initial assessment of the extent of time necessary to restore electric service to customers." Thousands of additional personnel are poised and ready to assist our employees in beginning the work of rebuilding our electric system." Initial assessments to determine the extent of destruction began Tuesday at daybreak, and to support restoration efforts, more than 2,000 additional workers from outside the company have begun to arrive.

Louisiana Public Service Commission reports approximately 890,300 customers, or 42% of customers in the state, are without power (as of 2:00 PM 8/30/05).

### **Louisiana Outages by Major Utility (8/30/05 2:00 PM)**

<b>Electric Utility</b>	<b>Customers w/o Power</b>	<b>Number of Consumers (1)</b>	<b>% customers w/o power</b>
Entergy Louisiana Inc	420,711	653,929	64%
Entergy Gulf States Inc	97,376	342,443	28%
Cleco Power LLC	80,810	257,299	31%
Entergy New Orleans Inc	201,369	215,163	94%
Dixie Electric Membership Corp	56,056	85,307	66%
Washington-St Tammany E C, Inc	20,000	41,304	48%
South Louisiana Elec Coop Assn	13,912	19,180	72%
City of Morgan	60	6,000	<1%

Entergy (Louisiana and Mississippi) has told its customers that they will experience extended power outages and that the severe damage caused by Hurricane Katrina to Entergy's system will require weeks to rebuild. Flooding, blocked access or other obstacles will hamper restoration.

The Waterford III Nuclear Power plant sustained no damage except to building off site. Post disaster preparations are being initiated by FEMA and the NRC to clear the facility for a restart.

### **Florida**

Approximately 194,900 customers, 2 percent of customers in the state, remain without power in Florida due to Katrina. This includes 136,300 Florida Power & Light customers, 57,491 Gulf Power customers, and 1,065 Cooperative customers. FPL has reported its goal of restoring power to 90 percent of its customers by tonight has been achieved. FPL fully expects to restore all of Broward County customers by Thursday night, and all of Miami-Dade by Friday night.

Gulf Power estimates that power will be restored to all customers by Wednesday evening. Gulf Power plans to send crews to support Mississippi Power restoration efforts after power has been restored to all their customers.

The Florida port of Pensacola remains closed due to lack of power.

### **Georgia**

Approximately 12,500 customers are without power in Georgia. All of those without power are Georgia Power customers. Georgia Power has stated that resources are available for quick restoration

### **Additional Information:**

#### **Gulf of Mexico Shut-in Production MMS release #3328**

Based on the latest data available from the Minerals Management Service, 78.75% of 819 manned platforms and 67.16% of 137 rigs currently operating in the GOM have been evacuated as of 11:30 a.m. August 30. Shut in oil production is 1,427,969 BOPD or 95.20% of daily production (which is currently approximately 1.5 million BOPD), and shut-in gas is 8.798 BCFPD or 87.99% of daily production (which is currently approximately 10.0 BCFPD). The cumulative shut-in oil production for the period 8/26/05 – 8/30/05 is 4,635,751 bbls or 0.847% of annual production. The cumulative shut-in production for the period 8/26/05 – 8/30/05 is 25.441 BCF of 0.423% of annual production

This survey is reflective of 68 companies' reports as of 11:30 a.m. Central Time.

Districts	Lake Jackson	Lake Charles	Lafayette	Houma	New Orleans	Total
Platforms Evacuated	69	134	144	121	177	645
Rigs Evacuated	4	16	20	26	24	90
Oil, BOPD Shut-in	90,072	49,050	237,048	341,194	710,605	1,427,969
Gas, MMCF/D Shut-In	845.64	1,769.86	1,204.76	2,078.64	2,899.66	8,798.54

Note: The cumulative numbers reflect updated production numbers from all previous reports. The reports only represent input received by 11:30 a.m. CDT. If a company does not report by 11:30 a.m. it is not included in the special information release, but it is included in the cumulative shut-in production. This may result in an apparent increase in the cumulative report amount.

<http://www.mms.gov/ooc/press/2005/press0830.htm>

### **New Orleans May be Out of Power for Weeks**

New Orleans Mayor Ray Nagin says 80% of city under water, some as much as 20 feet deep. Both New Orleans airports are underwater and there would be no electricity in the city for four to six weeks. Natural gas leaks have been reported throughout town, he said. There is also reportedly a leaking oil tanker that has run aground. <http://www.cnn.com/2005/WEATHER/08/30/katrina.neworleans/index.html>

### **Florida Officials Urge Citizens to Avoid Unnecessary Driving**

Florida officials said today that there are ample fuel supplies to get through the busy Labor Day weekend and beyond, but they also are urging Floridians to avoid any unnecessary driving. Major fuel companies continue to deliver millions of gallons of gasoline to ports in Jacksonville, Tampa and Fort Lauderdale. But the Port of Pensacola remained without power and was closed today, and oil refineries along the Gulf of Mexico have been shut down because of Hurricane Katrina.

<http://www.orlandosentinel.com/business/orl-bk-fuel-083005.0,2244165.story?coll=orl-home-headlines&track=rss>

## **Electricity**

### **Monticello Nuclear Plant Undergoing Full-Scale 3 Day Emergency Drill**

A three-day full-scale emergency drill is underway at the Monticello nuclear generating station in Monticello, Minnesota. The exercise began on August 29 and will conclude on August 31. Officials from the utility, Federal and local agencies are participating.

<http://miva.sctimes.com/miva/cgi-bin/miva?Web/page.mv+1+local+592411>

### **Update - TXU's Sandow Unit 4 Returning to Service Soon**

According to a report by Texas regulators, TXU will restart its 553 MW Sandow power plant on August 31. The unit was shut on August 29 to repair a boiler tube leak. Reuters 7:58, August 30, 2005.

### **Palo Verde Ramps up to 98 Percent of Capacity**

According to a report from the Nuclear Regulatory Commission, the 1,243 MW Unit 1 at the Palo Verde nuclear generating station in Arizona has ramped up to 98 percent of capacity as it exits an outage undertaken to repair an emergency generator.

Reuters 7:30, August 30, 2005.

### **Output at Grand Gulf Nuclear Plant Cut to 75 Percent of Capacity**

The 1,263 MW Grand Gulf nuclear generating station in Mississippi cut output to 75 percent of capacity according to the daily report of the Nuclear Regulatory Commission. There was no indication if the reduction in output was related to hurricane Katrina  
Reuters 7:21, August 30, 2005.

### **Dresden Unit 2 Output at 77 Percent of Capacity**

Output at the 850 MW unit 2 at the Dresden nuclear generating station in Illinois dropped to 77 of capacity down from 99 percent reported on August 29.  
Bloomberg 8:02, August 30, 2005.  
Reuters 8:06, August 29, 2005

### **AES's 225 Gas-fired Unit 3 at its Huntington Beach Plant in California Shut August 30**

Reuters 14:41, August 30, 2005.

For additional information on electricity outages related to Hurricane Katrina, see Highlights/Major Developments

## **Petroleum**

### **Oil Rigs Adrift**

Two of Shell's oil drilling rigs under contract with Noble Corporation and Transocean Inc. were reported to be adrift in the Gulf of Mexico August 29.

[http://today.reuters.co.uk/news/newsArticle.aspx?type=topNews&storyID=2005-08-30T032850Z\\_01\\_ROB586049\\_RTRUKOC\\_0\\_UK-WEATHER-KATRINA.xml](http://today.reuters.co.uk/news/newsArticle.aspx?type=topNews&storyID=2005-08-30T032850Z_01_ROB586049_RTRUKOC_0_UK-WEATHER-KATRINA.xml)

### **Production Platform Appears to be Lost**

Newfield Exploration Company announced on August 30 that its "A" production platform, which produced 1,500 bpd at Main Pass 138, appears to have been lost in the storm of Hurricane Katrina. Newfield is further assessing damages.

<http://biz.yahoo.com/prnews/050830/datu041.html?.v=23>

### **Infrastructure Damage Being Watched on Lake Borgne**

Louisiana's Lake Borgne, an oil and natural gas drilling areas in state waters, could have substantial infrastructure damage resulting from Hurricane Katrina passing through the middle.

<http://www.platts.com/Natural%20Gas/News/7052262.xml?S=n>

### **Venezuelan Oil Minister: OPEC Has No Spare Capacity - Cannot Raise Output**

On August 29, the Venezuelan Oil Minister said that OPEC is producing at maximum rates and does not have the ability to increase output beyond current levels.

Reuters 18:34, August 29, 2005.

### **Update - Petroecuador Production Recovering More Quickly Than Originally Estimated**

Restoration of full production for Petroecuador is now estimated to be complete by around October 7, several weeks earlier than originally estimated. At this time, there is no information as to when export volume will be restored.

Reuters 12:47, August 30, 2005.

For additional information on petroleum, see Highlights/Major Developments

## Natural Gas

### Pre-filing Procedures Proposed for New LNG Terminals

In accordance with the recently enacted Energy Policy Act of 2005, the Federal Energy Regulatory Commission (FERC) has proposed rules to require potential developers of new liquefied natural gas (LNG) terminals to initiate pre-filing procedures at least six months prior to filing a formal application. The Commission intends to issue a final rule by October 7, 2005.

<http://www.ferc.gov/press-room/pr-current/08-29-05.asp>

<http://intelligencepress.com/>

For additional information on natural gas, see Highlights/Major Developments

## Other News

### Survey Results: Utility Systems Likely Targets from Outside Threats

The results of a survey of utility industry IT executives commissioned by Trusted Network Technologies indicates that one third of the respondents believe that their control systems or energy delivery systems will be the target of some outside threat within the next two years. In addition, some 20 percent of the respondents indicated that their systems had already been targeted.

<http://www.trustednetworktech.com/documents/utisurveyannouncement8.24.05.pdf>

## Energy Prices

	Latest (08/30/05)	Week Ago	Year Ago
<b>CRUDE OIL</b> <b>West Texas Intermediate US</b> \$/Barrel	66.91	65.72	42.32
<b>NATURAL GAS</b> <b>Henry Hub</b> \$/Million Btu	12.36	9.96	5.05

Source: Reuters

### This Week in Petroleum from the Energy Information Administration (EIA)

<http://tonto.eia.doe.gov/oog/info/twip/twip.asp>

*Updated on Wednesdays*

### Weekly Petroleum Status Report from EIA

[http://www.eia.doe.gov/oil\\_gas/petroleum/data\\_publications/weekly\\_petroleum\\_status\\_report/wpsr.html](http://www.eia.doe.gov/oil_gas/petroleum/data_publications/weekly_petroleum_status_report/wpsr.html)

*Updated after 1:00pm (Eastern time) on Wednesdays*

### Natural Gas Weekly Update from EIA

<http://tonto.eia.doe.gov/oog/info/ngw/ngupdate.asp>

*Updated after 2:00 pm (Eastern time) on Thursdays*

### ENSEC threat awareness blog site from Energy Assurance

<http://ensec.blogspot.com>